



# CALIFORNIA

## Agricultural Bulletin

**EDD** Employment  
Development  
Department  
State of California

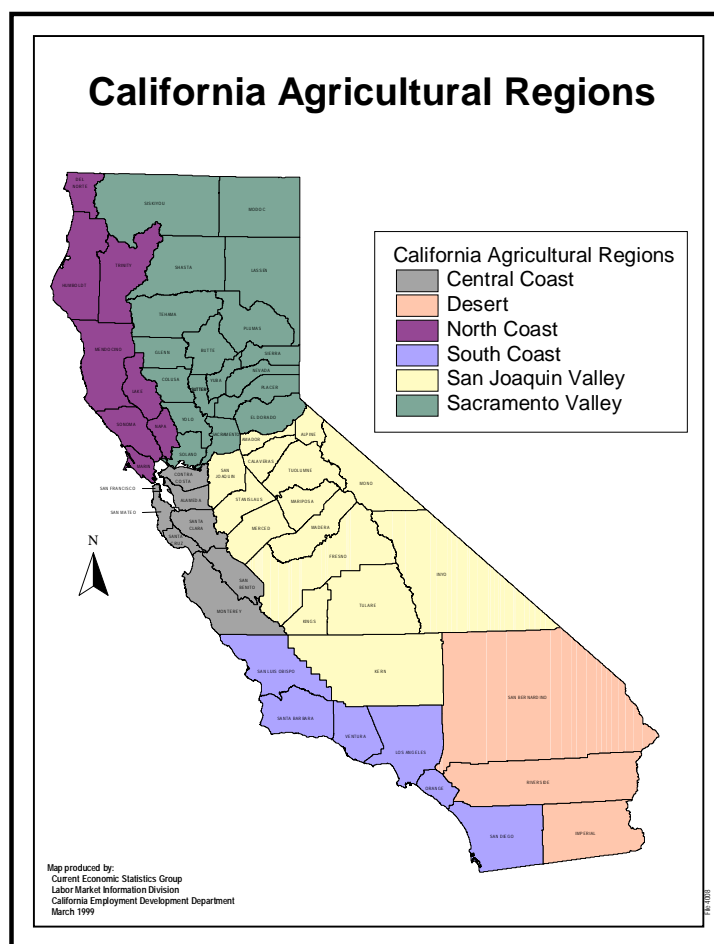
February 1999  
(Internet Version)

### Agricultural Overview

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This bulletin covers 27 agricultural industries in the State of California. The number of industries ranges from five to seventeen within each of the six geographic regions. The regions are the San Joaquin Valley, South Coast, Desert, Central Coast, Sacramento Valley, and North Coast (refer to map for details).



The data are organized into the following tables by state and region:

- Wage and Salary Workers
- Average Hourly Earnings

**LMID**  
Labor Market Information Division  
"Your Information Source"

## Introduction

The February 1999 issue is the second California Agricultural Bulletin produced since December 1996. Prior to January 1997, the U.S. Department of Agriculture (USDA) and the Employment Development Department (EDD) conducted separate, overlapping agricultural labor surveys.

Beginning with January 1997 data, EDD in cooperation with the USDA and through a grant from the U.S. Department of Labor has instituted new methods to estimate current agricultural employment, as well as earnings and hours worked based on sampling according to a probabilistic model of selection. EDD will continue to benchmark agricultural employment data yearly. As a result of changes in sampling and estimating procedures, farm employment data prior to January 1997 may not be strictly comparable to current estimates.

## Summary

Agricultural employment in California for February 1999 decreased 26,100 from the previous month, a decline of 8.6%. The change from January 1998 to February 1998 was an increase of 2,800. Over the month, Production/Crops registered a decrease of 8,800 (-5.8%) and Production/Livestock decreased 4,800 (-22.3%). Agricultural Services registered a decrease of 12,500 (-9.5%). Total California Agricultural Employment for February 1999 declined 20,400 from the February 1998 level. Agricultural Services accounted for 36% of the decrease, some of which is the result of the December 1998 freeze.

The San Joaquin Valley region saw a decline of 11,600 jobs from January to February with 55% of the drop registered in Agricultural Services. January 1998 to February 1998 saw a decline of 16,100 jobs.

Some field activities were delayed by rain throughout the month, particularly in the Sacramento and northern San Joaquin Valley regions. Cool weather slowed the growth and development of onion, garlic, and spinach crops in the San Joaquin Valley. Grass growth was also affected by the cool temperatures and the supplemental feeding of cattle continued.

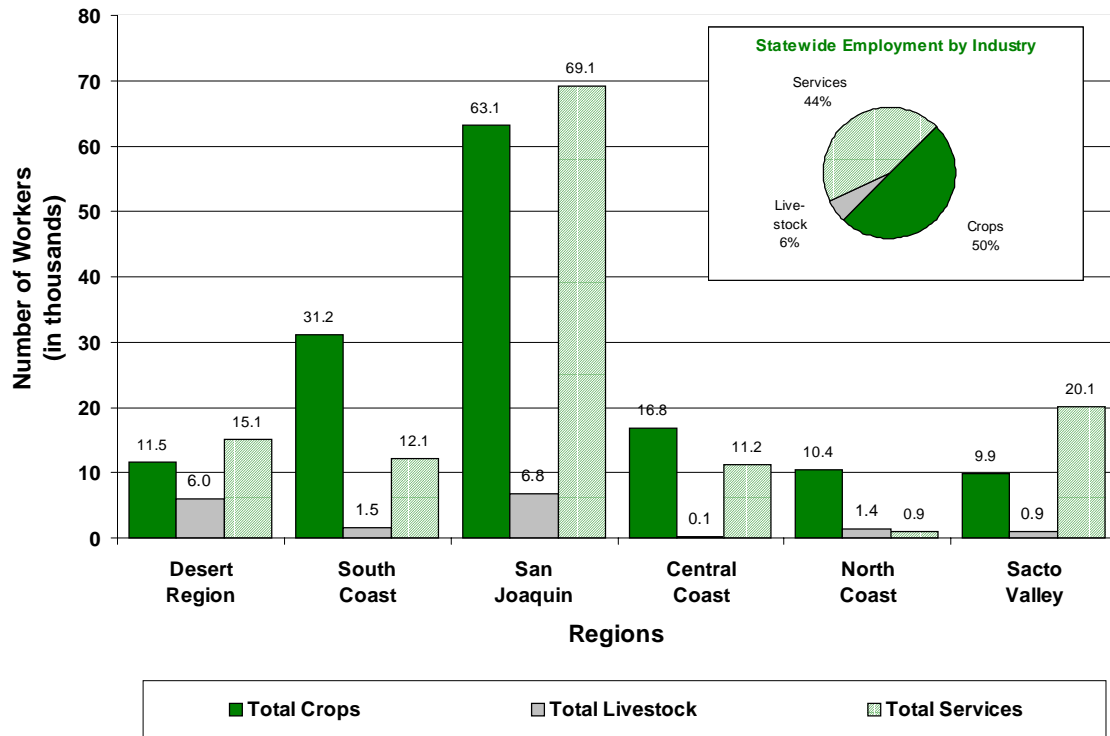
Citrus growers in the San Joaquin Valley picked salvageable fruit that remained after the December freeze. Most of the salvaged fruit was processed for juice and numerous packing houses either closed or effected cutbacks. Orchard cultural activities, such as pruning, brush shredding, and dormant spraying, continued. In Southern California, the citrus harvest, relatively untouched by the freeze, proceeded normally.

As identified by the California Department of Food and Agriculture, counties experiencing some of the most significant losses as a result of the December freeze include: Tulare (\$293.2 million); Kern (\$194.7 million); Fresno (\$90.7 million); Ventura (\$71.5 million); and Madera (\$14.9 million). As of March 31, 1999, 22 counties have reported some measure of loss.

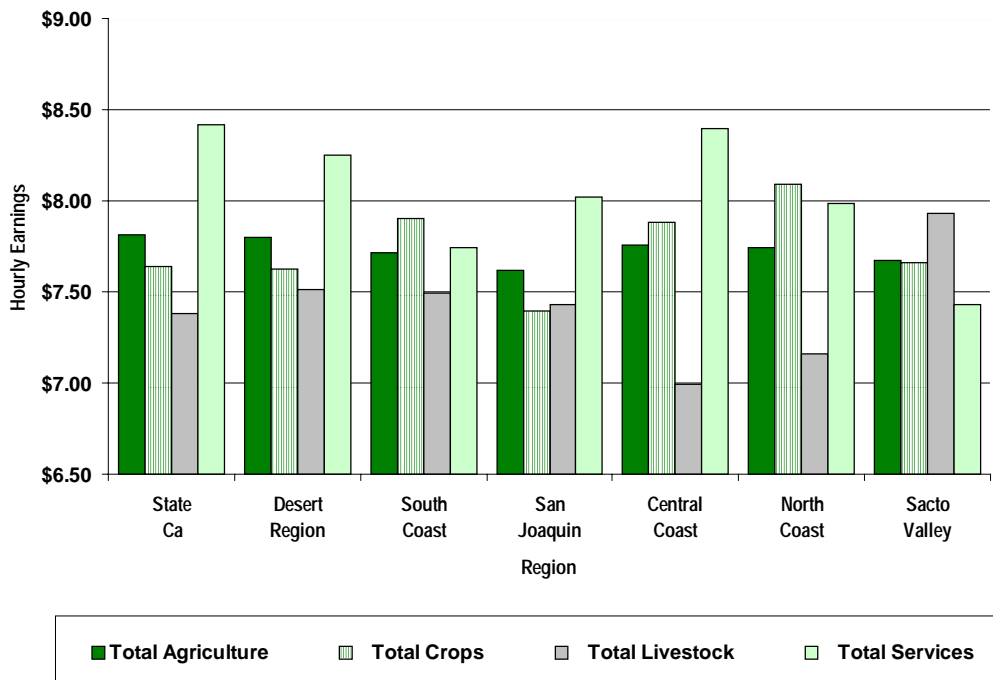
Notable losses to California's agricultural commodities include: oranges (\$512.1 million – the estimated loss to the Valencia orange crop alone is \$175.3 million); lemons, (\$80.7 million); avocados (\$40.6 million); strawberries (\$10.7 million) and nursery stock (\$7.7 million). In addition, combined losses to vegetables are estimated at more than \$19 million.

# Agricultural Summary Charts

## Wage and Salary Workers



## Average Hourly Earnings



# CALIFORNIA AGRICULTURAL EMPLOYMENT

Wage and Salary Workers  
(In Thousands)

Average Hourly Earnings  
(In dollars per hour)

Industry	Feb 1999	Jan 1999	Feb 1998
<b>Total Agriculture</b>	<b>288.8</b>	<b>305.0</b>	<b>299.1</b>
<b>Total Agricultural Production/Crops</b>	<b>143.6</b>	<b>152.4</b>	<b>147.9</b>
Cash Grains	1.4	1.4	1.3
Rice	0.9	0.6	0.7
Other Cash Grains	0.5	0.8	0.6
Field Crops Except Grains	7.8	8.7	7.4
Cotton	1.4	2.9	3.9
Other Field Crops	6.4	5.8	3.5
Vegetables and Melons	34.7	34.0	20.7
Total Fruits and Tree Nuts	58.3	65.6	68.8
Berries	7.1	7.2	10.6
Grapes	26.4	25.8	31.5
Tree Nuts	5.5	8.3	6.7
Citrus Fruits	3.0	3.2	4.6
Deciduous Tree Fruit	7.6	7.1	8.5
Other Fruits & Nuts	8.7	14.0	6.9
Total Horticultural Specialties	20.2	28.4	34.0
Ornamental Floral & Nursery	18.9	27.4	28.8
Food Crops Grown Under Cover	1.3	1.0	5.2
General Farm Primarily Crop	21.2	14.3	15.7
<b>Agricultural Production/Livestock</b>	<b>16.7</b>	<b>21.5</b>	<b>25.3</b>
Beef Cattle Feed Lots	0.6	0.3	0.5
Beef Cattle Except Feed Lots	1.4	2.2	2.8
Dairy Farms	8.1	11.0	14.2
Chicken Eggs	2.5	2.3	2.3
Turkey & Turkey Eggs	0.7	1.1	0.8
Other Livestock	3.4	4.6	4.7
<b>Total Agricultural Services</b>	<b>128.5</b>	<b>131.1</b>	<b>125.9</b>
Soil Preparation Services	0.5	1.2	1.5
Crop Services	31.7	33.9	38.9
Plant Cultivate & Protection	3.3	4.4	5.5
Harvest Primarily by Machine	1.6	6.0	4.1
Preparation Services for Market	26.3	22.6	28.7
Cotton Ginning	0.5	0.9	0.6
Total Farm Labor & Management	96.3	96.0	85.5
Farm Labor Contractors	91.2	87.6	77.6
Farm Management Services	5.1	8.4	7.9

Industry	Feb 1999	Jan 1999	Feb 1998
<b>Total Agriculture</b>	<b>7.81</b>	<b>7.82</b>	<b>7.74</b>
<b>Total Agricultural Production/Crops</b>	<b>7.64</b>	<b>7.65</b>	<b>7.42</b>
Cash Grains	7.21	7.74	8.26
Rice	6.86	7.80	9.15
Other Cash Grains	7.56	7.68	7.37
Field Crops Except Grains	7.69	7.41	7.24
Cotton	7.77	7.36	7.25
Other Field Crops	7.60	7.45	7.23
Vegetables and Melons	8.37	7.93	7.89
Total Fruits and Tree Nuts	7.50	7.45	6.70
Berries	7.06	6.88	6.25
Grapes	7.55	7.65	6.84
Tree Nuts	7.61	7.91	6.75
Citrus Fruits	8.36	7.36	7.32
Deciduous Tree Fruit	6.85	7.67	6.43
Other Fruits & Nuts	7.57	7.22	6.58
Total Horticultural Specialties	7.81	8.00	7.75
Ornamental Floral & Nursery	8.08	7.75	7.31
Food Crops Grown Under Cover	7.54	8.26	8.19
General Farm Primarily Crop	7.28	7.40	6.69
<b>Agricultural Production/Livestock</b>	<b>7.38</b>	<b>7.47</b>	<b>7.56</b>
Beef Cattle Feed Lots	7.54	7.45	7.13
Beef Cattle Except Feed Lots	7.21	7.60	8.21
Dairy Farms	8.04	8.19	7.89
Chicken Eggs	6.38	6.63	7.00
Turkey & Turkey Eggs	7.09	7.02	7.63
Other Livestock	8.02	7.95	7.49
<b>Total Agricultural Services</b>	<b>8.42</b>	<b>8.35</b>	<b>8.25</b>
Soil Preparation Services	8.82	8.86	9.75
Crop Services	8.62	8.40	8.01
Plant Cultivate & Protection	9.00	8.54	7.52
Harvest Primarily by Machine	8.60	8.14	8.13
Preparation Services for Market	7.62	7.68	7.48
Cotton Ginning	9.25	9.26	8.90
Total Farm Labor & Management	7.82	7.78	6.99
Farm Labor Contractors	7.32	7.25	6.62
Farm Management Services	8.32	8.30	7.36

Data Revised on October 20, 1999

# CENTRAL COAST AGRICULTURAL EMPLOYMENT

Wage and Salary Workers  
(In Thousands)

Industry	Feb 1999	Jan 1999	Feb 1998
<b>Total Agriculture</b>	<b>28.1</b>	<b>33.6</b>	<b>35.0</b>
<b>Total Agricultural Products/Crops</b>	<b>16.8</b>	<b>19.4</b>	<b>20.8</b>
Cash Grains	0.1	0.1	0.0
Rice	0.0	0.0	0.0
Other Cash Grains	0.1	0.1	0.0
Field Crops Except Grains	0.9	0.7	0.2
Cotton	0.0	0.0	0.0
Other Field Crops	0.9	0.7	0.2
Vegetables and Melons	4.1	8.2	7.0
Total Fruits and Tree Nuts	5.0	3.1	4.0
Berries	1.6	2.5	2.3
Grapes	0.0	0.0	1.1
Tree Nuts	0.1	0.0	0.2
Citrus Fruits	0.0	0.0	0.0
Deciduous Tree Fruit	0.2	0.5	0.3
Other Fruits & Nuts	3.1	0.1	0.1
Total Horticultural Specialties	3.6	5.8	8.4
Ornamental Floral & Nursery	3.6	5.5	6.3
Food Crops Grown Under Cover	0.0	0.3	2.1
General Farm Primarily Crop	3.1	1.5	1.2
<b>Agricultural Production/Livestock</b>	<b>0.1</b>	<b>0.6</b>	<b>0.9</b>
Beef Cattle Feed Lots	0.0	0.0	0.0
Beef Cattle Except Feed Lots	0.0	0.2	0.3
Dairy Farms	0.0	0.0	0.1
Chicken Eggs	0.0	0.0	0.1
Turkey & Turkey Eggs	0.1	0.1	0.1
Other Livestock	0.0	0.3	0.3
<b>Total Agricultural Services</b>	<b>11.2</b>	<b>13.6</b>	<b>13.3</b>
Soil Preparation Services	0.0	0.2	0.7
Crop Services	4.8	7.2	5.4
Plant Cultivate & Protection	0.0	0.2	0.5
Harvest Primarily by Machine	0.5	2.7	0.2
Preparation Services for Market	4.3	4.3	4.7
Cotton Ginning	0.0	0.0	0.0
Total Farm Labor & Management	6.4	6.2	7.2
Farm Labor Contractors	6.4	5.5	6.1
Farm Management Services	0.0	0.7	1.1

na = not available

Average Hourly Earnings  
(In dollars per hour)

Industry	Feb 1999	Jan 1999	Feb 1998
<b>Total Agriculture</b>	<b>7.76</b>	<b>7.95</b>	<b>7.90</b>
<b>Total Agricultural Products/Crops</b>	<b>7.88</b>	<b>7.84</b>	<b>7.74</b>
Cash Grains	8.08	8.04	na
Rice	na	na	na
Other Cash Grains	8.08	8.04	na
Field Crops Except Grains	7.32	7.11	7.15
Cotton	na	na	na
Other Field Crops	7.32	7.11	7.15
Vegetables and Melons	9.28	8.70	8.50
Total Fruits and Tree Nuts	7.36	7.78	7.13
Berries	7.54	6.87	6.75
Grapes	na	na	6.65
Tree Nuts	7.53	7.56	7.50
Citrus Fruits	na	na	na
Deciduous Tree Fruit	6.30	8.65	6.90
Other Fruits & Nuts	8.08	8.02	7.85
Total Horticultural Specialties	7.84	8.26	7.95
Ornamental Floral & Nursery	7.84	8.03	7.25
Food Crops Grown Under Cover	na	8.49	8.65
General Farm Primarily Crop	7.39	7.18	7.36
<b>Agricultural Production/Livestock</b>	<b>6.99</b>	<b>7.46</b>	<b>7.67</b>
Beef Cattle Feed Lots	na	na	na
Beef Cattle Except Feed Lots	na	7.48	8.00
Dairy Farms	na	na	8.00
Chicken Eggs	na	na	7.00
Turkey & Turkey Eggs	6.99	6.96	7.65
Other Livestock	na	7.95	7.70
<b>Total Agricultural Services</b>	<b>8.40</b>	<b>8.55</b>	<b>8.28</b>
Soil Preparation Services	na	9.15	9.80
Crop Services	9.00	8.93	7.92
Plant Cultivate & Protection	na	8.71	7.50
Harvest Primarily by Machine	9.27	9.34	8.05
Preparation Services for Market	8.72	8.73	8.20
Cotton Ginning	na	na	na
Total Farm Labor & Management	7.80	7.57	7.13
Farm Labor Contractors	7.80	6.68	7.00
Farm Management Services	na	8.45	7.25

# DESERT AGRICULTURAL EMPLOYMENT

## Wage and Salary Workers (In Thousands)

Industry	Feb 1999	Jan 1999	Feb 1998
<b>Total Agriculture</b>	<b>32.6</b>	<b>27.5</b>	<b>33.4</b>
<b>Total Agricultural Production/Crops</b>	<b>11.5</b>	<b>6.9</b>	<b>10.6</b>
Cash Grains	0.0	0.0	0.1
Rice	0.0	0.0	0.0
Other Cash Grains	0.0	0.0	0.1
Field Crops Except Grains	0.9	0.8	1.3
Cotton	0.0	0.0	0.0
Other Field Crops	0.9	0.8	1.3
Vegetables and Melons	5.0	1.6	3.5
Total Fruits and Tree Nuts	0.7	1.3	2.7
Berries	0.0	0.0	0.1
Grapes	0.4	0.5	0.9
Tree Nuts	0.0	0.4	0.1
Citrus Fruits	0.0	0.0	0.7
Deciduous Tree Fruit	0.0	0.0	0.1
Other Fruits & Nuts	0.3	0.4	0.8
Total Horticultural Specialties	1.3	1.4	2.8
Ornamental Floral & Nursery	1.3	1.4	1.0
Food Crops Grown Under Cover	0.0	0.0	1.8
General Farm Primarily Crop	3.6	1.8	0.2
<b>Agricultural Production/Livestock</b>	<b>6.0</b>	<b>4.6</b>	<b>5.5</b>
Beef Cattle Feed Lots	0.3	0.2	0.3
Beef Cattle Except Feed Lots	0.5	0.5	0.5
Dairy Farms	2.6	1.8	2.8
Chicken Eggs	1.3	1.2	1.2
Turkey & Turkey Eggs	0.0	0.0	0.0
Other Livestock	1.3	0.9	0.7
<b>Total Agricultural Services</b>	<b>15.1</b>	<b>16.0</b>	<b>17.3</b>
Soil Preparation Services	0.4	0.3	0.2
Crop Services	3.8	3.9	6.4
Plant Cultivate & Protection	0.2	0.3	0.6
Harvest Primarily by Machine	0.0	1.3	2.0
Preparation Services for Market	3.6	2.3	3.8
Cotton Ginning	0.0	0.0	0.0
Total Farm Labor & Management	10.9	11.8	10.7
Farm Labor Contractors	10.8	10.6	10.1
Farm Management Services	0.1	1.2	0.6

na = not available

## Average Hourly Earnings (In dollars per hour)

Industry	Feb 1999	Jan 1999	Feb 1998
<b>Total Agriculture</b>	<b>7.80</b>	<b>7.75</b>	<b>7.51</b>
<b>Total Agricultural Production/Crops</b>	<b>7.63</b>	<b>7.45</b>	<b>6.91</b>
Cash Grains	na	na	7.25
Rice	na	na	na
Other Cash Grains	na	na	7.25
Field Crops Except Grains	7.67	7.34	6.89
Cotton	na	na	na
Other Field Crops	7.67	7.34	6.89
Vegetables and Melons	8.87	7.37	7.00
Total Fruits and Tree Nuts	7.45	7.58	6.40
Berries	na	na	6.00
Grapes	7.19	8.08	6.25
Tree Nuts	na	8.27	6.25
Citrus Fruits	na	7.20	7.27
Deciduous Tree Fruit	na	na	6.40
Other Fruits & Nuts	7.71	6.78	6.25
Total Horticultural Specialties	7.55	7.51	7.79
Ornamental Floral & Nursery	7.55	7.51	7.48
Food Crops Grown Under Cover	na	na	8.10
General Farm Primarily Crop	6.59	7.45	6.15
<b>Agricultural Production/Livestock</b>	<b>7.52</b>	<b>7.74</b>	<b>7.65</b>
Beef Cattle Feed Lots	7.32	7.40	7.00
Beef Cattle Except Feed Lots	6.71	7.40	8.00
Dairy Farms	9.00	9.07	9.28
Chicken Eggs	6.52	6.88	6.75
Turkey & Turkey Eggs	na	na	na
Other Livestock	8.03	7.95	7.20
<b>Total Agricultural Services</b>	<b>8.25</b>	<b>8.05</b>	<b>7.97</b>
Soil Preparation Services	9.64	9.06	9.75
Crop Services	7.79	7.58	7.04
Plant Cultivate & Protection	8.66	8.64	6.65
Harvest Primarily by Machine	na	7.25	7.72
Preparation Services for Market	6.91	6.86	6.75
Cotton Ginning	na	na	na
Total Farm Labor & Management	7.33	7.50	7.12
Farm Labor Contractors	6.81	7.18	6.55
Farm Management Services	7.84	7.82	7.69

# NORTH COAST AGRICULTURAL EMPLOYMENT

Wage and Salary Workers  
(In Thousands)

Average Hourly Earnings  
(In dollars per hour)

Industry	Feb 1999	Jan 1999	Feb 1998
<b>Total Agriculture</b>	<b>12.7</b>	<b>7.0</b>	<b>12.2</b>
<b>Total Agricultural Production/Crops</b>	<b>10.4</b>	<b>4.0</b>	<b>9.4</b>
Cash Grains	0.0	0.0	0.0
Rice	0.0	0.0	0.0
Other Cash Grains	0.0	0.0	0.0
Field Crops Except Grains	0.0	0.0	0.0
Cotton	0.0	0.0	0.0
Other Field Crops	0.0	0.0	0.0
Vegetables and Melons	5.3	0.5	0.2
Total Fruits and Tree Nuts	4.0	2.3	7.2
Berries	0.0	0.0	0.0
Grapes	2.9	2.0	6.2
Tree Nuts	0.0	0.0	0.1
Citrus Fruits	0.0	0.0	0.0
Deciduous Tree Fruit	1.1	0.3	0.8
Other Fruits & Nuts	0.0	0.0	0.1
Total Horticultural Specialties	1.1	1.1	1.8
Ornamental Floral & Nursery	1.1	0.9	1.7
Food Crops Grown Under Cover	0.0	0.2	0.1
General Farm Primarily Crop	0.0	0.1	0.2
<b>Agricultural Production/Livestock</b>	<b>1.4</b>	<b>1.4</b>	<b>1.5</b>
Beef Cattle Feed Lots	0.0	0.0	0.0
Beef Cattle Except Feed Lots	0.1	0.3	0.2
Dairy Farms	0.7	0.6	0.9
Chicken Eggs	0.0	0.0	0.0
Turkey & Turkey Eggs	0.1	0.2	0.1
Other Livestock	0.5	0.3	0.3
<b>Total Agricultural Services</b>	<b>0.9</b>	<b>1.6</b>	<b>1.3</b>
Soil Preparation Services	0.0	0.2	0.0
Crop Services	0.1	0.1	0.1
Plant Cultivate & Protection	0.0	0.0	0.0
Harvest Primarily by Machine	0.0	0.0	0.0
Preparation Services for Market	0.1	0.1	0.1
Cotton Ginning	0.0	0.0	0.0
Total Farm Labor & Management	0.8	1.3	1.2
Farm Labor Contractors	0.3	0.2	0.2
Farm Management Services	0.5	1.1	1.0

Industry	Feb 1999	Jan 1999	Feb 1998
<b>Total Agriculture</b>	<b>7.74</b>	<b>7.78</b>	<b>7.58</b>
<b>Total Agricultural Production/Crops</b>	<b>8.09</b>	<b>7.81</b>	<b>7.40</b>
Cash Grains	na	na	na
Rice	na	na	na
Other Cash Grains	na	na	na
Field Crops Except Grains	na	na	na
Cotton	na	na	na
Other Field Crops	na	na	na
Vegetables and Melons	8.50	8.24	8.50
Total Fruits and Tree Nuts	7.65	7.35	7.10
Berries	na	na	na
Grapes	8.34	7.99	8.18
Tree Nuts	na	na	7.00
Citrus Fruits	na	na	na
Deciduous Tree Fruit	6.95	6.71	7.00
Other Fruits & Nuts	na	na	6.20
Total Horticultural Specialties	8.12	8.01	7.75
Ornamental Floral & Nursery	8.12	7.96	7.50
Food Crops Grown Under Cover	na	8.05	8.00
General Farm Primarily Crop	na	7.64	6.25
<b>Agricultural Production/Livestock</b>	<b>7.16</b>	<b>7.25</b>	<b>7.78</b>
Beef Cattle Feed Lots	na	na	na
Beef Cattle Except Feed Lots	7.34	7.53	8.50
Dairy Farms	6.95	6.79	6.75
Chicken Eggs	na	na	na
Turkey & Turkey Eggs	7.12	7.10	7.75
Other Livestock	7.23	7.56	8.10
<b>Total Agricultural Services</b>	<b>7.99</b>	<b>8.29</b>	<b>7.58</b>
Soil Preparation Services	na	9.02	na
Crop Services	6.91	7.45	7.40
Plant Cultivate & Protection	na	na	na
Harvest Primarily by Machine	na	na	na
Preparation Services for Market	6.91	7.45	7.40
Cotton Ginning	na	na	na
Total Farm Labor & Management	9.06	8.40	7.75
Farm Labor Contractors	8.90	7.63	6.50
Farm Management Services	9.22	9.16	9.00

na = not available

# SOUTH COAST AGRICULTURAL EMPLOYMENT

Wage and Salary Workers  
(In Thousands)

Average Hourly Earnings  
(In dollars per hour)

Industry	Feb 1999	Jan 1999	Feb 1998
<b>Total Agriculture</b>	<b>44.8</b>	<b>61.1</b>	<b>53.1</b>
<b>Total Agricultural Production/Crops</b>	<b>31.2</b>	<b>46.7</b>	<b>38.7</b>
Cash Grains	0.1	0.1	0.1
Rice	0.0	0.0	0.0
Other Cash Grains	0.1	0.1	0.1
Field Crops Except Grains	0.7	0.8	0.2
Cotton	0.0	0.0	0.1
Other Field Crops	0.7	0.8	0.1
Vegetables and Melons	4.6	12.6	6.1
Total Fruits and Tree Nuts	11.8	16.0	13.5
Berries	5.5	4.7	8.1
Grapes	1.3	1.4	2.0
Tree Nuts	0.0	0.0	0.1
Citrus Fruits	1.2	1.1	1.7
Deciduous Tree Fruit	0.1	0.0	0.1
Other Fruits & Nuts	3.7	8.8	1.5
Total Horticultural Specialties	10.4	15.1	16.1
Ornamental Floral & Nursery	9.7	14.6	15.2
Food Crops Grown Under Cover	0.7	0.5	0.9
General Farm Primarily Crop	3.6	2.1	2.7
<b>Agricultural Production/Livestock</b>	<b>1.5</b>	<b>1.9</b>	<b>1.8</b>
Beef Cattle Feed Lots	0.0	0.0	0.0
Beef Cattle Except Feed Lots	0.0	0.1	0.2
Dairy Farms	0.0	0.1	0.2
Chicken Eggs	1.0	0.8	0.4
Turkey & Turkey Eggs	0.0	0.0	0.0
Other Livestock	0.5	0.9	1.0
<b>Total Agricultural Services</b>	<b>12.1</b>	<b>12.5</b>	<b>12.6</b>
Soil Preparation Services	0.0	0.1	0.1
Crop Services	2.0	3.1	2.8
Plant Cultivate & Protection	0.0	0.3	0.4
Harvest Primarily by Machine	0.0	0.4	0.3
Preparation Services for Market	2.0	2.4	2.1
Cotton Ginning	0.0	0.0	0.0
Total Farm Labor & Management	10.1	9.3	9.7
Farm Labor Contractors	8.7	7.7	8.5
Farm Management Services	1.4	1.6	1.2

Industry	Feb 1999	Jan 1999	Feb 1998
<b>Total Agriculture</b>	<b>7.71</b>	<b>7.86</b>	<b>7.67</b>
<b>Total Agricultural Production/Crops</b>	<b>7.90</b>	<b>7.60</b>	<b>7.10</b>
Cash Grains	7.78	7.67	7.73
Rice	na	na	na
Other Cash Grains	7.78	7.67	7.73
Field Crops Except Grains	8.45	7.51	7.00
Cotton	na	na	7.00
Other Field Crops	8.45	7.51	7.00
Vegetables and Melons	8.39	7.74	7.28
Total Fruits and Tree Nuts	7.48	7.38	6.61
Berries	6.58	6.89	6.25
Grapes	8.06	7.42	6.65
Tree Nuts	na	na	6.82
Citrus Fruits	8.57	7.55	7.40
Deciduous Tree Fruit	6.12	na	6.00
Other Fruits & Nuts	8.09	7.65	6.55
Total Horticultural Specialties	8.13	7.80	7.71
Ornamental Floral & Nursery	7.95	7.37	6.76
Food Crops Grown Under Cover	8.30	8.23	8.65
General Farm Primarily Crop	7.20	7.49	6.90
<b>Agricultural Production/Livestock</b>	<b>7.50</b>	<b>8.07</b>	<b>7.85</b>
Beef Cattle Feed Lots	na	na	na
Beef Cattle Except Feed Lots	na	7.94	7.75
Dairy Farms	na	8.89	8.50
Chicken Eggs	6.27	6.65	7.00
Turkey & Turkey Eggs	na	na	na
Other Livestock	8.72	8.80	8.15
<b>Total Agricultural Services</b>	<b>7.74</b>	<b>7.92</b>	<b>8.07</b>
Soil Preparation Services	na	7.87	9.75
Crop Services	7.89	7.95	7.68
Plant Cultivate & Protection	na	8.35	7.75
Harvest Primarily by Machine	na	7.76	7.50
Preparation Services for Market	7.89	7.75	7.80
Cotton Ginning	na	na	na
Total Farm Labor & Management	7.60	7.95	6.78
Farm Labor Contractors	7.42	7.69	6.80
Farm Management Services	7.77	8.20	6.75

na = not available



# SAN JOAQUIN AGRICULTURAL EMPLOYMENT

## Wage and Salary Workers (In Thousands)

Industry	Feb 1999	Jan 1999	Feb 1998
<b>Total Agriculture</b>	<b>139.0</b>	<b>144.2</b>	<b>147.9</b>
<b>Total Agricultural Production/Crops</b>	<b>63.1</b>	<b>63.2</b>	<b>56.8</b>
Cash Grains	0.2	0.3	0.2
Rice	0.1	0.0	0.0
Other Cash Grains	0.2	0.3	0.2
Field Crops Except Grains	5.0	6.0	5.2
Cotton	1.4	2.9	3.8
Other Field Crops	3.6	3.1	1.4
Vegetables and Melons	13.6	9.9	3.2
Total Fruits and Tree Nuts	33.2	36.6	35.0
Berries	0.0	0.0	0.1
Grapes	21.6	21.4	20.4
Tree Nuts	3.9	5.2	4.3
Citrus Fruits	1.8	2.1	2.2
Deciduous Tree Fruit	4.5	5.1	4.6
Other Fruits & Nuts	1.4	2.8	3.4
Total Horticultural Specialties	2.6	2.9	3.4
Ornamental Floral & Nursery	2.6	2.9	3.3
Food Crops Grown Under Cover	0.6	0.0	0.1
General Farm Primarily Crop	8.5	7.5	9.8
<b>Agricultural Production/Livestock</b>	<b>6.8</b>	<b>11.9</b>	<b>14.1</b>
Beef Cattle Feed Lots	0.3	0.1	0.2
Beef Cattle Except Feed Lots	0.5	1.0	1.1
Dairy Farms	4.5	8.1	9.7
Chicken Eggs	0.2	0.3	0.6
Turkey & Turkey Eggs	0.5	0.7	0.6
Other Livestock	0.8	1.7	1.9
<b>Total Agricultural Services</b>	<b>69.1</b>	<b>69.1</b>	<b>77.0</b>
Soil Preparation Services	0.1	0.3	0.4
Crop Services	18.9	17.9	22.1
Plant Cultivate & Protection	2.6	3.1	3.6
Harvest Primarily by Machine	1.0	1.3	1.5
Preparation Services for Market	14.8	12.6	16.4
Cotton Ginning	0.5	0.9	0.6
Total Farm Labor & Management	50.1	50.9	54.5
Farm Labor Contractors	47.0	47.6	50.9
Farm Management Services	3.1	3.3	3.6

na = not available

## Average Hourly Earnings (In dollars per hour)

Industry	Feb 1999	Jan 1999	Feb 1998
<b>Total Agriculture</b>	<b>7.62</b>	<b>7.87</b>	<b>7.61</b>
<b>Total Agricultural Production/Crops</b>	<b>7.40</b>	<b>7.48</b>	<b>7.03</b>
Cash Grains	6.64	7.47	7.19
Rice	6.44	na	na
Other Cash Grains	6.84	7.47	7.19
Field Crops Except Grains	7.53	7.47	7.30
Cotton	7.77	7.36	7.50
Other Field Crops	7.29	7.58	7.09
Vegetables and Melons	7.32	7.73	7.21
Total Fruits and Tree Nuts	7.56	7.17	6.49
Berries	na	na	6.00
Grapes	7.04	6.78	6.65
Tree Nuts	7.91	7.69	6.50
Citrus Fruits	8.14	7.33	7.29
Deciduous Tree Fruit	7.58	7.19	5.85
Other Fruits & Nuts	7.11	6.86	6.62
Total Horticultural Specialties	7.45	7.63	7.43
Ornamental Floral & Nursery	8.13	7.63	7.10
Food Crops Grown Under Cover	6.77	na	7.75
General Farm Primarily Crop	7.89	7.38	6.55
<b>Agricultural Production/Livestock</b>	<b>7.43</b>	<b>7.51</b>	<b>7.58</b>
Beef Cattle Feed Lots	7.75	7.50	7.25
Beef Cattle Except Feed Lots	6.85	7.91	8.60
Dairy Farms	8.33	8.30	8.00
Chicken Eggs	6.35	6.37	7.25
Turkey & Turkey Eggs	7.15	7.03	7.50
Other Livestock	8.16	7.94	6.85
<b>Total Agricultural Services</b>	<b>8.02</b>	<b>8.63</b>	<b>8.23</b>
Soil Preparation Services	8.00	9.49	9.70
Crop Services	8.60	8.36	8.33
Plant Cultivate & Protection	9.31	8.40	8.25
Harvest Primarily by Machine	8.40	8.32	9.05
Preparation Services for Market	7.42	7.45	7.10
Cotton Ginning	9.25	9.26	8.90
Total Farm Labor & Management	7.47	8.05	6.68
Farm Labor Contractors	6.49	7.27	6.50
Farm Management Services	8.45	8.83	6.85

# SACRAMENTO VALLEY AGRICULTURAL EMPLOYMENT

## Wage and Salary Workers (In Thousands)

Industry	Feb 1999	Jan 1999	Feb 1998
<b>Total Agriculture</b>	<b>30.9</b>	<b>31.6</b>	<b>17.5</b>
<b>Total Agricultural Production/Crops</b>	<b>9.9</b>	<b>12.2</b>	<b>11.6</b>
Cash Grains	0.9	0.9	0.9
Rice	0.8	0.6	0.7
Other Cash Grains	0.1	0.3	0.2
Field Crops Except Grains	0.3	0.4	0.5
Cotton	0.0	0.0	0.0
Other Field Crops	0.3	0.4	0.5
Vegetables and Melons	2.1	1.2	0.7
Total Fruits and Tree Nuts	3.6	6.3	6.4
Berries	0.0	0.0	0.0
Grapes	0.2	0.5	0.9
Tree Nuts	1.5	2.7	1.9
Citrus Fruits	0.0	0.0	0.0
Deciduous Tree Fruit	1.7	1.2	2.6
Other Fruits & Nuts	0.2	1.9	1.0
Total Horticultural Specialties	0.6	2.1	1.5
Ornamental Floral & Nursery	0.6	2.1	1.3
Food Crops Grown Under Cover	0.0	0.0	0.2
General Farm Primarily Crop	2.4	1.3	1.6
<b>Agricultural Production/Livestock</b>	<b>0.9</b>	<b>1.1</b>	<b>1.5</b>
Beef Cattle Feed Lots	0.0	0.0	0.0
Beef Cattle Except Feed Lots	0.3	0.1	0.5
Dairy Farms	0.3	0.4	0.5
Chicken Eggs	0.0	0.0	0.0
Turkey & Turkey Eggs	0.0	0.1	0.0
Other Livestock	0.3	0.5	0.5
<b>Total Agricultural Services</b>	<b>20.1</b>	<b>18.3</b>	<b>4.4</b>
Soil Preparation Services	0.0	0.1	0.1
Crop Services	2.1	1.7	2.1
Plant Cultivate & Protection	0.5	0.5	0.4
Harvest Primarily by Machine	0.1	0.3	0.1
Preparation Services for Market	1.5	0.9	1.6
Cotton Ginning	0.0	0.0	0.0
Total Farm Labor & Management	18.0	16.5	2.2
Farm Labor Contractors	18.0	16.0	1.8
Farm Management Services	0.0	0.5	0.4

na = not available

## Average Hourly Earnings (In dollars per hour)

Industry	Feb 1999	Jan 1999	Feb 1998
<b>Total Agriculture</b>	<b>7.67</b>	<b>7.70</b>	<b>7.68</b>
<b>Total Agricultural Production/Crops</b>	<b>7.66</b>	<b>7.70</b>	<b>7.66</b>
Cash Grains	7.42	7.66	8.23
Rice	7.28	7.80	9.15
Other Cash Grains	7.55	7.52	7.30
Field Crops Except Grains	7.27	7.71	8.00
Cotton	na	na	na
Other Field Crops	7.27	7.71	8.00
Vegetables and Melons	7.88	7.81	8.85
Total Fruits and Tree Nuts	7.16	7.76	6.39
Berries	na	na	na
Grapes	7.10	8.00	6.65
Tree Nuts	7.38	8.12	6.45
Citrus Fruits	na	na	na
Deciduous Tree Fruit	7.30	8.11	6.45
Other Fruits & Nuts	6.87	6.79	6.00
Total Horticultural Specialties	8.90	8.01	7.88
Ornamental Floral & Nursery	8.90	8.01	7.75
Food Crops Grown Under Cover	na	na	8.00
General Farm Primarily Crop	7.35	7.26	6.95
<b>Agricultural Production/Livestock</b>	<b>7.93</b>	<b>7.43</b>	<b>7.39</b>
Beef Cattle Feed Lots	na	na	na
Beef Cattle Except Feed Lots	7.94	7.33	8.42
Dairy Farms	7.87	7.91	6.82
Chicken Eggs	na	na	na
Turkey & Turkey Eggs	na	6.98	na
Other Livestock	7.98	7.49	6.93
<b>Total Agricultural Services</b>	<b>7.43</b>	<b>7.97</b>	<b>8.01</b>
Soil Preparation Services	na	8.55	9.75
Crop Services	8.34	8.16	7.80
Plant Cultivate & Protection	9.04	8.61	7.45
Harvest Primarily by Machine	8.14	8.01	8.35
Preparation Services for Market	7.84	7.85	7.60
Cotton Ginning	na	na	na
Total Farm Labor & Management	6.52	7.21	6.47
Farm Labor Contractors	6.52	7.07	6.35
Farm Management Services	na	7.35	6.59

## DATA NOTES

### Data Sources:

These data are obtained from two sources: the Employment Development Department (EDD) Covered Employment and Wages (ES-202) data files and a monthly survey conducted by the California Agriculture Statistical Service (CASS) of the U.S. Department of Agriculture (USDA) and the Labor Market Information Division of EDD of 4,200 agricultural employers. The sample was selected to be statistically representative of the state's agricultural employers by size, geographic location, and industry categories. Sample data are gathered for the survey week that includes the 12<sup>th</sup> calendar day of the month. All data in this bulletin represent activities taking place during this mid-month period. Same month prior year employment data are benchmarked to the ES-202 data files maintained by EDD.

### Data Comments:

To aid in accurate usage and interpretation of the data, please note the following:

- Regional data may show greater variability than statewide data because of small sample size and variable reporting patterns in specific industries.
- Where data cannot be estimated because of inadequate sample reporting, the letters "**na**" have been entered into the field to indicate estimates are not available.
- Wage data include wages of supervisors and hired non-production workers (primarily administrative personnel). Piece rate data are also included where applicable.
- Fishing, forestry, and hunting industry data are not included in the Agricultural Services estimates. Unique seasonal industry patterns of employment make producing employment estimates for these industries problematic.
- Employment data do not include employers of unpaid family workers.
- Agricultural workers who are employed by farm labor contractors are reported in Agricultural Services under that industry category. Employment levels in Crop Production and Livestock Production do not reflect their activities in the associated industries which contract with the farm labor contractors.
- Total agricultural employment and hourly earnings estimates in this bulletin are derived from the monthly Current Employment Statistics for Agriculture project. Estimates in this bulletin will differ from other agricultural estimates published by EDD and the USDA because of differences in the number of industries covered and in the definition of agricultural workers.

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